

**TECHNICAL STANDARDS  
FOR  
ELECTRONIC GAMING EQUIPMENT  
ELECTRONIC GAMES OF CHANCE**

**A. DEFINITIONS**

For the purposes of this section:

1. "Credit" means the smallest unit of value that may be used to play a game on an electronic game of chance or that may be redeemed in currency.
2. "Distributor" means a person who obtains an electronic game of chance from a manufacturer and who intends to furnish it to the Tribe.
3. "Manufacturer" means a person who manufactures, produces, or assembles an electronic game of chance, and who intends to furnish it to a distributor or the Tribe.
3. "Electronic Game of Chance" means gaming equipment which is electric, electronic or mechanical which plays a game which involves an element of prize, chance and consideration, and which is linked to a central computer for purposed of security, monitoring, and auditing.

**B. HARDWARE REQUIREMENTS FOR ELECTRONIC GAMES OF CHANCE**

1. **Physical Hazard.** Electronic and mechanical parts and design principles of the electronic game of chance may not subject a player to physical hazards.
2. **Surge Protector.** A surge protector must be installed on the line that feeds power to the electronic game of chance.
3. **Battery Backup.** A battery backup or an equivalent shall be installed on the electronic game of chance for the electronic meters and must be capable of maintaining the accuracy of all information required by this Compact for 180 days after power is discontinued from the machine. The backup device shall be kept within the locked microprocessor compartment.
4. **On/Off Switch.** An on/off switch that controls the electronic current used in the operation of an electronic game of chance and any associated equipment must be located in a place which is readily accessible within the interior of the machine.
5. **Static Discharge.** The operation of each electronic game of chance must not be adversely affected by a static discharge or other electromagnetic interference.
6. **Approved Coin and Bill Acceptors.** At least one electronic coin acceptor must be installed in or on each electronic game of chance. The equipment may also contain bill acceptors for denominations determined by the Tribe. Prior to operation, all models of coin and bill acceptors installed must have been tested and approved in writing by a gaming test laboratory as provided in Section D.
7. **Cabinet Security.**
  - a. The cabinet or interior area of the electronic game of chance shall be locked and not readily accessible.
  - b. Electronic games of chance shall be monitored by an on-line electronic game management/reporting system which has been approved by the independent gaming test laboratory. Each electronic game of chance must be linked to a central computer system accessible to the Tribal Gaming Commission personnel and the State Gaming Agency personnel for information and control programs related to security, monitoring and auditing.

The central computer system shall compile and record, among other things, the following information:

1. Amount deposited in the coin drop area and bill acceptor stack area;
  2. Number of credits won;
  3. Number of credits wagered;
  4. Value of the credits hand paid in dollars and cents by the attendant;
  5. Value of machine fills from the cage;
  6. Amount of net revenue to the machine;
  7. The on-line system shall indicate the time of day and the date of all security events and other accounting messages/events;
  8. Machine serial number;
  9. Terminal number;
  10. The program name and version, which may be input manually;
  11. Number of times the coin/cash compartments have been opened, including date and time;
  12. Number of times the cabinet has been opened, including date and time.
- c. Electronic games of chance utilizing coin drop hoppers must detect;
1. Hopper empty;
  8. Hopper jam; and
  9. Hopper runaway/malfunction.

**8. Repairs and Service.** An authorized agent or employee of the Tribe may open the gaming cabinet to effect repairs and service.

**9. Secure Electronic Components.**

- a. Logic Boards and Electronically Programmable Read Only Memory (EPROM) chips and other logic control components shall be located in a separate compartment within the electronic game of chance and that compartment shall be locked and sealed with security tape with a different key or combination than that used for the main cabinet door and cash compartment. This key shall be opened in the presence of a Tribal Gaming Inspector.
- b. Upon installation, a Tribal Gaming Inspector shall affix or cause to be affixed to the EPROM chip(s) of each electronic game of chance a strip of security tape, capable of evidencing the removal of an EPROM chip if the EPROM chip is removed from the circuit board. The security tape shall be secured and available only to the Tribal Gaming Inspector. The Tribal Gaming Commission shall maintain accurate and complete records of the identification number of each EPROM chip installed in each electronic game of chance.

**10. MEAL Cards.** For all entries into the electronic gaming equipment as set forth in paragraphs 8 and 9, a written record must be made on a machine entry authorization log (MEAL) indicating the time, date and purpose for entering said machine.

**11. Secure Cash Compartment.** The coins and currency compartment shall be locked separately from the main cabinet area, and secured with a different key or combination than used for the main cabinet door, except that a separate cash compartment shall not be required for coins necessary to pay prizes in a machine which pays prizes through a drop hopper as permitted in this section. Cash compartment keys must be kept in a secure location. Except as provided in this section, the compartment in which the inserted coins and bills are deposited shall be locked at all times. The Tribal Gaming Inspector must be present when the cash compartment in the gaming cabinet is opened for the purpose of collecting the accumulated cash. The person collecting the accumulated cash shall record the amount collected. The surveillance department shall be notified prior to opening the cash compartment.

12. **Hardware Switches Prohibited.** No hardware switches may be installed on an electronic game of chance or on any associated equipment which may alter the pay tables or payout percentages in the operation of the gaming equipment. Hardware switches may be installed to control the machine's sound.
13. **Operation as Part of a Network.** The hardware requirements of this subsection shall not be construed to prevent the operation of the electronic game of chance as part of a network with an aggregate prize or prizes, provided:
  - a. An electronic game of chance capable of bi-directional communication with internal or external associated equipment must utilize communication protocol which insures that erroneous data or signals will not adversely affect the operation of the game. The operation of the local network must be approved by the independent gaming test laboratory; and
  - b. Where the network links the Tribe's electronic games of chance to tribal games of chance on other Indian reservations with the State of Kansas or outside the State of Kansas, each Tribe participating in the network shall have in force a Class III gaming compact authorizing such gaming as part of a network. All gaming activities shall occur on said reservations.
14. **Machine Identification.** A non-removable plate shall be affixed to each electronic game of chance. This plate shall have written upon it the machine's serial number model number and the name of the manufacturer. All electronic gaming equipment shall also have a permanently affixed label with a location/asset number prominently displayed.

### **C. SOFTWARE REQUIREMENTS FOR ELECTRONIC GAMES OF CHANCE**

1. **Randomness Testing.** Each electronic game of chance must have a microprocessor based random number generator that will determine the occurrence of the specific card, symbol, number, or stop position to be displayed. A selection process will be considered random if it meets all of the following requirements:
  - a. chi-square Analysis. Each card, symbol, number, or stop position which is wholly or partially determinative of the outcome of the game satisfies the 99 percent confidence limit using the standard chi-square analysis.
  - b. Runs Test. Each-card, symbol, number, or stop position does not as a significant statistic produce predictable patterns of game elements or occurrences. Each card, symbol, number, or stop position will be considered random if it meets the 99 percent confidence level with regard to the "run test" or any generally accepted pattern testing statistic.
  - c. Correlation Analysis. Each card, symbol, number, or stop position is independently chosen without regard to any other card, symbol, number or stop position, drawn within that game play. Each card, symbol, number, or stop position is considered random if it meets the 99 percent confidence level using standard correlation analysis.
  - d. Serial Correlation Analysis. Each, card, symbol, number, or stop position is independently chosen without reference to the same card, number, or stop position in the previous game. Each card, number, or stop position is considered random if it met the 99 percent confidence level using standard serial correlation analysis.
  - e. Live Game Correlation. Electronic games of chance that are representative of live gambling games must fairly and accurately depict the play of the live game.
2. **Software Requirements for Percentage Payout.** Each electronic game of chance must meet the following minimum theoretical percentage payout during the expected lifetime of the game:
  - a. Electronic games of chance shall pay out a minimum of 80 percent of the amount wagered. The theoretical payout percentage will be determined using standard methods of probability theory.

- b. Each electronic games of chance must have a probability of obtaining the maximum payout which is greater than 1 in 50,000,000 for each play.
- c. Electric gaming equipment must not be capable of being set in any mode which would violate any provisions of this section.

- 3. Software Requirements of continuation After Game Malfunction.** Each game must be capable of continuing the current game with all current game features after a game malfunction is cleared. This provision does not apply if the game is rendered totally inoperable; however, the current wager and all player credits prior to the malfunction must be returned to the player.
- 4. Metering.** An electronic game of chance must have both electronic and electromechanical meters. The electronic game of chance electronic meters must have tally totals to eight digits and be capable of "rolling over" when the maximum value is reached. The electronic game of chance control program must provide the means for on-demand display of the electronic meters via a key switch on the exterior of the machine. This key shall be kept in the office of the electronic gaming equipment manager and shall be accessible only to that manager.

**The required mechanical meters are as follows:**

- a. The coins-in meter must accumulate all tokens that are wagered either by actual tokens inserted or credits bet.
- b. The coins-out meter must accumulate all tokens that are paid by the hopper or credits that are bet.
- c. The coins-dropped meter must accumulate the number of coins that have been diverted into a drop bucket and the credit value of all currency inserted for play.
- d. The jackpots-paid meter must reflect the cumulative amounts paid by an attendant whether or not the jackpot was progressive or non- progressive.

**The required electronic meters are as follows:**

- a. The coins-in meter must accumulate all tokens that are wagered either by actual tokens inserted or credits bet.
- b. The coins-out meter must accumulate all tokens that are paid by the hopper or credits that are bet.
- c. The coins-dropped meter must accumulate the number of coins that have been diverted into a drop bucket and the credit value of all currency inserted for play.
- d. The jackpots-paid meter must reflect the cumulative amounts paid by an attendant whether or not the jackpot was progressive or non- progressive.
- e. The number of games played.
- f. The number of times the front cabinet door was opened.
- g. The number of times the drop door was opened, including the mechanism which holds the currency within the machine.

If the electronic game of chance is equipped with a Bill Acceptor, the following meters are required:

- a. The total number of bills that were accepted (in dollars) or a breakdown of the number of each denomination of bill accepted.
5. No Automatic Clearing of Accounting Meters. No game may have a mechanism by which an error will cause the electronic accounting meters to automatically clear. All meter reading must be recorded and dated in the presence of a Tribal Gaming Inspector both before and after the electronic accounting meter is cleared.
6. Display of Information. The required display information shall be kept under glass or another transparent substance and at no time may stickers or other removable devices be placed on the machine's face.
7. Rules Display. Each electronic game of chance shall have the following information displayed on the video screen and/or permanently affixed on the game itself in a location conspicuous to the player:
  - a. The rules of the game prior to each game being played;
  - b. The maximum and minimum wagers, the amount of credits which may be won for each winning hand or combination of numbers or symbols and;
  - c. The credits the player has cumulated.

**D. TESTING OF ELECTRONIC GAMES OF CHANCE**

1. **Testing and Approval of Electronic Games of Chance.** No electronic games of chance may be purchased, lease or otherwise acquired by the Tribe unless:
  - a. The electronic game of chance, or a prototype thereof, has been tested, approved or certified by a gaming test laboratory as meeting the requirements and standards as set forth herein and of the Compact. For purposes of these standards and the Compact, a gaming test laboratory is a laboratory agreed to and designated in writing by the Tribe and the State Gaming Agency as competent and qualified to conduct scientific tests and evaluations of electronic games of chance and related equipment. A laboratory operated by or under contract with the states of New Jersey, South Dakota or Colorado constitutes a designated gaming test laboratory.
2. **Testing of Electronic Games of Chance.** If required by the gaming test laboratory, the Tribe shall require the manufacturer or distributor to transport not more than two working models of the electronic games of chance and related equipment to a location designated by the laboratory for testing, examination, and analysis. In addition, the manufacturer or distributor shall supply copies of electronic game of chance illustrations, schematics, block diagrams, circuit analyses, technical and operation manuals, program object and source codes, hexadecimal dumps (the compiled computer program represented in base-16 format), and any other information requested by the gaming laboratory. The Tribe shall require the manufacturer or distributor to pay for any and all costs for the transportation, testing, examination, and analysis. The testing, examination, and analysis may include the entire dismantling of the electronic games of chance and related equipment and some tests may result in damage or destruction to one or more electronic components of the devices. If required by the laboratory, the Tribe must require the manufacturer to provide specialized equipment or the services of an independent technical expert to assist the testing, examination, and analysis.
3. **Report of Test Results.** At the conclusion of each test, the laboratory shall provide to the Tribe and the State Gaming Agency, a report that contains findings, conclusions, and a determination that the electronic game of chance and related equipment conforms or fails to conform to the hardware and software requirements of these standards and standards of the Compact. If modifications can be made which would bring the electronic game of chance or related equipment into compliance, the report may contain recommendations for such modifications. A report from the laboratory stating that the machine is an eligible electronic gaming device under the terms of the Compact and that it meets the technical standards defined herein shall constitute authority for the machine to be shipped to the Tribe's Class III gaming facility.
4. **Modifications of Approved Electronic Games of Chance.** No modification to the assembly or operational functions of any electronic game of chance or related equipment may be made after testing and installation unless a

gaming test laboratory certifies to the Tribe and the State Gaming Agency that the modified standards. Any proposed modifications shall be subject to the requirements of the paragraphs above, before the modification may be implemented.

#### **E. CONFORMITY TO TECHNICAL STANDARDS**

The Tribe shall require the manufacturer or distributor to certify, in writing, that, upon installation, each electronic game of chance:

- a. Conforms precisely to the exact specifications of the electronic game of chance or prototypes tested and approved by gaming test laboratory.
- b. Operates and plays in accordance with the technical standards set forth in these provisions.